Applied Mathematics Seminar

Soft metrics for decision analysis under uncertainty

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Abstract: Modern decision making challenges the human capacity to reason in an environment of uncertainty, imprecision, and incompleteness of information. Probability measures are not well-suited when the evidence is scarce and unreliable. Built from fuzzy sets, possibility metrics overcomes some of the restrictions and insufficiencies of probabilities, in a complementary, yet not competitive manner. We show the theoretical foundation and the interdisciplinary approach required to devise soft metrics as attributes of decision criteria that cannot be expressed numerically. This talk concludes with an example of soft metrics used in real-world ranking exercises.

Monday, September 22 at 4:00 PM in SEO 636